



Castledown

 OPEN ACCESS

Technology in Language Teaching & Learning

ISSN 2652-1687

<https://www.castledown.com/journals/tltl/>

Technology in Language Teaching & Learning, 8, 103723 (2026)

<https://doi.org/10.29140/tltl.2026.103723>

How Does AI Work as a “Game Changer”? Self-Determination and Influencing Factors in EFL Students’ Use of AI for Academic Writing



HAO TRAN 

University of Queensland, Australia

Nguyen Trai University, Vietnam

Hao.tran@uq.edu.au

Abstract

Generative artificial intelligence (AI) has been recognised as a “game changer” in academic writing, a long-standing challenge for learners of English as a Foreign Language (EFL). However, how EFL learners use AI tools and which factors influence this use, prerequisites for reshaping academic writing pedagogy in the age of AI, remain underexplored. Drawing on Self-Determination Theory (SDT) and its three constructs of autonomy, competence, and relatedness, this study investigates EFL students’ motivations for using AI tools in academic writing and how age, gender, study level, proficiency, discipline, and institution shape their use. Using a validated SDT questionnaire designed for academic writing purposes, the study reports findings from 314 survey respondents and seven follow-up interviews across three Vietnamese universities. Results show no significant differences by gender or age, nor between undergraduate and postgraduate students. However, language proficiency affects autonomy and competence but not relatedness. Discipline and institution emerged as statistically significant variables across all three constructs. These findings highlight the need for tailored AI literacy support aligned with differentiated EAP pedagogical strategies and institutional policies that recognise disciplinary, linguistic, and contextual diversity and accommodate students’ varying proficiency levels. Attention should be given to higher-order skills and strategy-and exam-oriented writing tasks prominent in EFL contexts. In response to the need to advance inclusive EAP pedagogies and instructional responses, this study offers key pedagogical recommendations for developing human-centred academic writing pedagogy in EFL settings in the age of AI.

Keywords: Academic writing, AI, Self-Determination Theory (SDT), English for Academic Purposes (EAP), EFL contexts.

Copyright: © 2026 Hao Tran. This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. **Data Availability Statement:** All relevant data are within this paper.

Introduction

Academic writing plays a pivotal role in higher education, functioning as the primary medium through which learners articulate ideas, engage critically, and participate in scholarly discourse and communication (Campbell, 2019; Fan et al., 2024). For English as a Foreign Language (EFL) learners, mastering academic writing in English is essential for access to university programs and postgraduate study, as well as for shaping their future professional trajectories (Altınmakas & Bayyurt, 2019). However, academic writing remains one of the most challenging skills for EFL students, particularly in terms of style, rhetorical functions, and genre structure (Huang, 2024; Lu, 2025).

The emergence of generative artificial intelligence (AI) tools such as ChatGPT has been considered a “game changer” in language education (Chapelle, 2025; Robertson et al., 2024) and has dramatically reshaped the EFL writing teaching and learning landscape. These tools not only provide linguistic corrections and support idea generation, structural organisation, and rhetorical clarity (Wiboolyasarini et al., 2025), but also reduce cognitive load, foster higher-order writing functions, and boost learner motivation (Fan et al., 2024) and writing efficacy (e.g. Huang & Mizumoto, 2024). One of AI's distinct advantages lies in its ability to provide immediate and personalised feedback that often surpasses teacher comments in breadth and precision across content, organisation, and language (Guo & Wang, 2024; Teng, 2024; Zhang & Wang, 2025). By alleviating writing-related anxiety and offering tailored scaffolding, AI, particularly when combined with human guidance, can help students, especially those with lower proficiency or limited time, develop a more positive English learning experience (Wang, 2024; Wang et al., 2025).

Despite the reported benefits in supporting EFL learners with their academic English writing, the novelty of AI also raises concerns. One major concern is academic integrity, as AI tools may facilitate plagiarism, complicate detection, and prompt calls for redesigned assessment practices (Almanea, 2024; Lodge et al., 2023). Beyond EFL contexts, AI's ‘hallucinations’ - such as fabricated references, have been widely prominent, with recent studies highlighting the persistence of false citations (e.g. Jones, 2025). Overreliance on AI could undermine creativity, critical thinking, and editing skills (Fuchs, 2023; Wang, 2024) as well as reduce memory retention and metacognitive engagement (“metacognitive laziness”) (Fan et al., 2025) or potentially leading to “cognitive debt” (Kosmyna et al., 2025). Notably, as Alsaiani et al. (2025) state AI interventions in most studies have mainly targeted the metacognitive and cognitive aspects of self-regulated learning, while motivational dimensions remain largely overlooked. In EFL educational settings such as Vietnam, where educational culture is often shaped by hierarchical structures and exam focus, learners' interactions with AI and the factors influencing their use warrant further exploration to advance the development for inclusive EAP pedagogies in the age of AI (Hu, 2026).

Drawing on Self-Determination Theory (SDT) (Deci & Ryan, 2002) as a theoretical framework to unpack students' motivations in using AI through their perceptions and regulation of its use, this study addresses this gap by examining Vietnamese EFL students' experiences of autonomy, competence and relatedness, as well as the influence of demographic and educational factors such as age, gender, educational level (undergraduate vs postgraduate), discipline, language proficiency and institutions. The findings will generate insights into how AI can be integrated into English for Academic Purposes (EAP) instruction in ways that align with EFL learners' motivational and pedagogical needs, ultimately supporting more effective and sustainable academic writing development in EFL contexts in the age of AI.

Academic Writing for EFL Learners

While functioning as a gateway to university admission, academic achievement, and postgraduate opportunities (Altınmakas & Bayyurt, 2019), English academic writing proficiency presents substantial

challenges for EFL learners. Students must simultaneously manage disciplinary content and language development, and academic conventions as they contend with linguistic limitations and limited metacognitive awareness of writing as a process (Nghị & Truong, 2023). This dual demand of content and language mastery is further compounded by traditional, exam-oriented pedagogies that offer limited scaffolding, which in turn can lead to reduced confidence and heightened anxiety among students striving to meet academic writing conventions. For example, Le and Nguyen (2025) highlight the impact of linguistic, structural, and affective proficiency in mitigating these challenges for tertiary English majors, showing that these dimensions significantly predict lower writing difficulties and collectively account for over one-third of the variance in students' academic writing challenges.

Sociocultural factors further compound these challenges. Writing is considered as a socially situated practice, mediated by cultural traditions, institutional structures, and issues of identity and power (Le & Nguyen, 2025). EFL writers often experience tension between maintaining local rhetorical traditions and adapting to Anglo-American academic discourse, highlighting the sociocultural negotiations embedded in academic writing (Nghị & Truong, 2023). Institutional norms and disciplinary expectations shape students' engagement with English academic writing (Kaufhold & Tusting, 2019). In Vietnam, teacher-centred practices, hierarchical student-teacher relationships, and exam-oriented curricula strongly influence how learners approach academic writing, often privileging accuracy and teacher approval over critical voice or autonomy (Nguyen & Habók, 2021; Trinh & Pho, 2024). In other words, EFL learners' writing difficulties extend beyond surface linguistic issues to strategic, metacognitive, and discourse-level dimensions shaped by broader cultural and institutional conditions.

Generative AI as a Game Changer in EFL Learners' Academic Writing

The emergence of AI-assisted writing tools has been increasingly and widely recognised as a “game changer” (Chapelle, 2025) for EFL learners, fundamentally reshaping how they approach academic writing (Nelson et al., 2025). While earlier technologies such as grammar checkers, spell checkers, and machine translation were primarily corrective in nature, addressing surface-level linguistic difficulties (Figueredo & Varnhagen, 2006), AI platforms like ChatGPT provide more dynamic forms of scaffolding, offering real-time feedback on coherence, organisation, and rhetorical development (Polakova & Ivenz, 2024; Zhang & Wang, 2025). Emerging scholarship acknowledges AI's potential to act as “a more knowledgeable other” (Stojanov, 2023), offering scaffolding and expert-like guidance for complex writing tasks (Wang, 2024; Wang et al., 2025). For example, Marzuki et al. (2023) through surveys and interviews with Indonesian thesis writers, found that AI tools such as ChatGPT supported paraphrasing, reduced anxiety, and facilitated plagiarism avoidance. More recently, Mekheimer (2025) demonstrated that Grammarly-assisted AI feedback boosted Egyptian postgraduate learners' confidence, encouraged revision, and fostered greater cohesion and organisation.

Although research on AI in EFL writing has expanded in recent years, much of the focus remains on functional aspects such as grammar correction, idea generation, and the reduction of cognitive load. These studies, while valuable, largely emphasise accuracy and surface-level improvements without adequately addressing the motivational dimensions that underpin students' engagement with AI. The question of how AI fulfills this role in practice, particularly in relation to learners' motivational orientations and influencing factors within the cultural and pedagogical specificities of EFL contexts, such as Vietnam, warrants further investigation. These conditions may shape how learners engage with AI-enhanced writing tools, influencing whether such technologies foster or hinder their development as autonomous academic writers to further advance inclusive EAP pedagogies and instructional responses (Hu, 2026). To address this gap, the present study draws on SDT (Deci & Ryan, 2002), a widely applied framework for examining human motivation in educational contexts, to investigate the motivational and pedagogical dynamics of AI use among Vietnamese EFL students in supporting their academic writing.

Unpacking the “Game Changer” Perception via Self-Determination Theory

In light of SDT, students' motivations are unpacked through three fundamental dimensions: autonomy, competence, and relatedness (Deci & Ryan, 2002). Autonomy refers to learners' sense of choice, self-direction and ownership, supported by experiences of personal interest and value, but potentially undermined by external control. Competence reflects feelings of effectiveness and capability, fostered by environments that provide appropriate challenges and constructive feedback. Relatedness pertains to feeling connected to others, and is fostered through care, respect, and a sense of belonging within supportive interpersonal relationships. SDT has been widely used to explore students' motivations in language learning (Al-Hoorie et al., 2025; Noels, 2023), and, more recently to examine their use of AI in academic writing (e.g. Du & Alm, 2024; Tran et al., 2025; Wang, 2024; Wang et al., 2025). However, limited studies have explored students' motivation through an SDT lens, particularly in relation to contextual influences such as demographic and educational factors (Tran et al., 2025).

Notably, contextual factors play a crucial role in SDT, as they shape learners' motivational dynamics, influencing behavioural regulation, engagement, and a range of outcomes (Noels, 2001). Variations in instructional methods, learning materials, and institutional policies surrounding AI, alongside broader educational culture, may affect students' self-determined use of AI tools (Al-Hoorie et al., 2025; Trinh & Ngo, 2024). In EFL settings such as Vietnam, where learning environments are often characterised by hierarchical structures and exam-oriented practices, students' interactions with AI warrant closer examination. Understanding how factors such as proficiency level, disciplinary background, and university policies influence students' perceptions and use of AI in academic writing can provide deeper insights into how they navigate autonomy, competence, and relatedness when engaging with these tools. Such insights, in turn, can also inform culturally sensitive and pedagogically sound approaches to academic writing instruction in the age of AI.

This study thus aims to address the following research questions:

1. How do EFL students perceive their autonomy, competence, and relatedness in using AI tools for academic writing?
2. How do students' demographic (i.e. age, gender) and educational factors (i.e. level of education, proficiency, field of study, and institutional context) shape their perceptions?

Methods

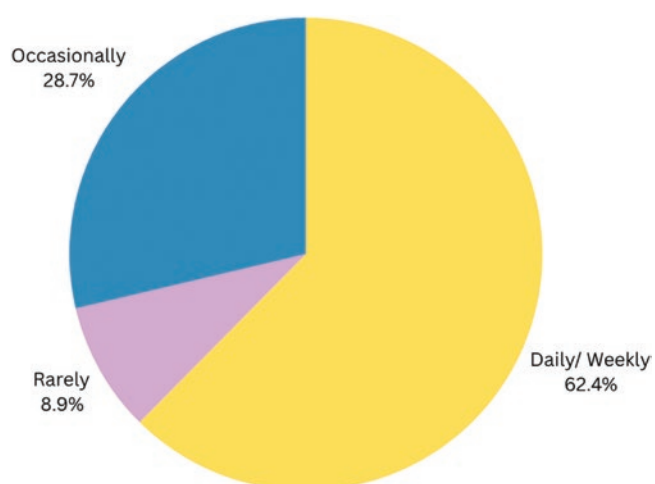
This study is part of a larger project (Ethics approval ref: 2024/HE001969) that explores how students in both EFL and ESL contexts across different disciplines perceive and use AI tools for academic writing (Tran et al., 2025). In the current study, I report data collected from closed-ended survey responses of EFL learners, along with interviews with seven EFL students, to provide a more detailed understanding of how they use AI tools for academic writing and how demographic and educational factors within this specific teaching and learning context influence their use.

Participants

A total of 314 valid responses were collected from Vietnamese students across three Vietnamese universities (VU) (see Table 1). Regarding AI use for academic writing, as shown in Figure 1, only 8.9% reported that they rarely used AI tools, whereas nearly 91% reported using these tools daily, weekly, or occasionally.

Table 1 *Demographic Information of the Respondents (N = 314)*

Category	Specification	Count
Institutions	VU1	50
	VU2	185
	VU3	79
Gender	Male	102
	Female	205
	Non-binary/Prefer not to say	7
Age	18–24	294
	25–34	12
	Under 18	8
Level of Education	Undergraduate	282
	Postgraduate	32
Proficiency	A2	5
	B1	24
	B2	84
	C1	21
	None	180
Faculty	Other (please specify)	174
	Humanities, Arts and Social Sciences (HASS)	60
	Business Economics and Law (BEL)	29
	Engineering, Architecture and IT (EAIT)	26
	Science	8
	Health and Behavioural Sciences (HABS)	6
	Medicine	1

**Figure 1** *Students' Reported Frequency of AI Use*

Data Collection

Online Survey

In the original study, an online survey mapping SDT constructs to academic writing functions was developed and validated (Tran et al., 2025). The survey consisted of four sections. Section 1 (10 items) gathered demographic information from participants, including background variables such as gender, academic major, level of study, first language, students' self-reported English proficiency level, and frequency of AI tool use. Sections 2, 3, and 4 contained 8, 8 and 7 close-ended questions to measure participants' autonomy, competence, and relatedness, respectively. Specifically, autonomy, competence, and relatedness were measured through items assessing students' sense of ownership in using AI tools, their perceived ability to complete writing tasks with AI support, and their perceived sense of support and connection while using AI tools for academic writing. To enhance response precision, interval comparability and greater psychometric robustness, all close-ended questions were answered using a 0–100 continuous scale on Qualtrics, rather than a traditional 5-point Likert scale.

Interview

Following the questionnaire, respondents were invited to voluntarily participate in semi-structured interviews to elaborate on their survey responses and discuss in greater depth their perceptions of AI use, including influences from their academic writing instruction, specific academic writing purposes, relationships with teachers and peers, and other potential instructional and sociocultural factors. The interviews were conducted in English via Zoom and lasted 30-40 minutes each. Due to the voluntary nature of participation, the interview sample was small; however, the seven participants represented three universities in Vietnam: EFL1 (Business, VU1), EFL2 (IT, VU2), and EFL3-7 (TESOL, VU3). Given the limited sample size and uneven disciplinary representation, the qualitative data are used to provide explanatory depth and contextual insight into the survey findings rather than to support broader generalisation.

Data Analysis

Survey: Statistical Analyses

In the original project (Tran et al., 2025), a confirmatory factor analysis was conducted to validate the SDT survey and examine its internal consistency and discriminant validity. The scale demonstrated good internal consistency, with Composite Reliability values above 0.70 and below 0.95, and Average Variance Extracted values for all latent constructs exceeding 0.50. Convergent validity was supported by standardised factor loadings above the 0.50 threshold (ranging from 0.695 to 0.878), confirming strong item-level reliability and internal coherence across the latent constructs. In the current study, only responses from the EFL context are reported, focusing on the mean scores of each item within each construct to provide deeper insight into EFL learners' perceptions. Given the exploratory design of this study and the uneven distribution across several demographic subgroups, using mean scores help provide an overview of trends across the three SDT constructs. Where relevant, independent samples t-tests and one-way ANOVA were also conducted to examine group differences which can provide further details regarding the impact of different demographic and educational factors on learners' SDT use.

Thematic Analysis

To analyse interviews data, thematic analysis was conducted (Braun & Clarke, 2006), which includes six-steps, ranging from (1) familiarisation and (2) initial coding to (3) theme development, (4) review,

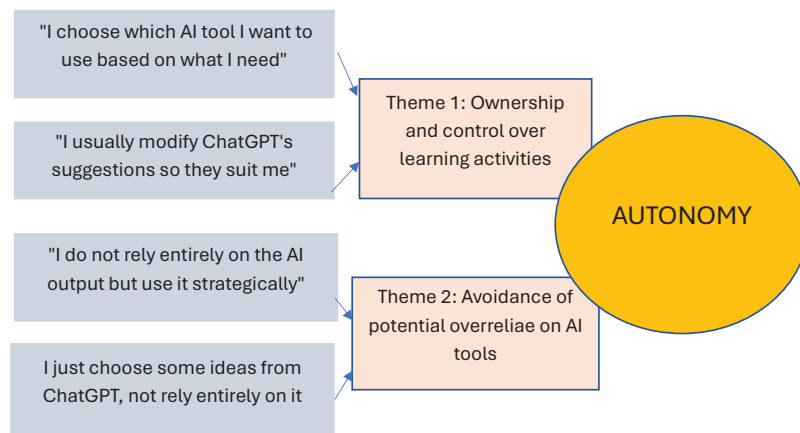


Figure 2 *Sample of Themes and Sub-themes Coded and Categorised*

(5) defining and naming themes, and (6) reporting. In particular, after repeatedly reviewing transcripts in Steps 1 and 2, concise codes were created and organised in Excel, then grouped into preliminary themes aligned with autonomy, competence, and relatedness in Steps 3 and 4. In Steps 5 and 6, these sub-themes were refined, defined, and illustrated with data examples or direct interview excerpts (with occasional grammatical modifications for clarity) to capture the breadth and depth of students' AI use. Figure 2 presents a sample of how selected codes from the interview transcripts were categorised into sub-themes within the construct "autonomy". Similar methods were conducted for competence and relatedness.

Findings

The following section presents the findings of the study following the two research questions.

Research Question 1: How do EFL Students Perceive their Autonomy, Competence and Relatedness in Using AI Tools for Academic Writing?

Both questionnaires and students' interviews have shown that students showed a moderate to strong sense of autonomy when using AI tools. They make conscious choices, evaluate AI outputs, and adapt content, whereas a moderate overall level of perceived competence. AI tools help students feel capable in some areas, especially surface-level skills, but they remain unsure about more advanced academic writing tasks. Notably, perceived relatedness is more variable, with scores ranging from low-moderate for relational connection to very strong regarding peer norms. While students strongly believe peers are using AI, and feel supported overall, they do not feel strong interpersonal connection *through* AI tools, and they do not prefer AI over human feedback.

Autonomy – Student's Ownership and Decision-making of AI Tools

The survey results indicate that students experience a generally high sense of autonomy when using AI tools for academic writing. Across the eight autonomy items (Figure 3), mean scores ranged from 58.96 to 63.99, suggesting that students perceive themselves as active decision-makers throughout the writing process. The highest-rated behaviour was regularly checking the accuracy of AI-generated information ($M = 63.99$), showing that students maintain evaluative control rather than relying passively on AI output. Students also reported strong autonomous engagement in using AI at specific stages of writing ($M = 62.86$) and in modifying AI suggestions to meet their own writing needs ($M = 61.23$).

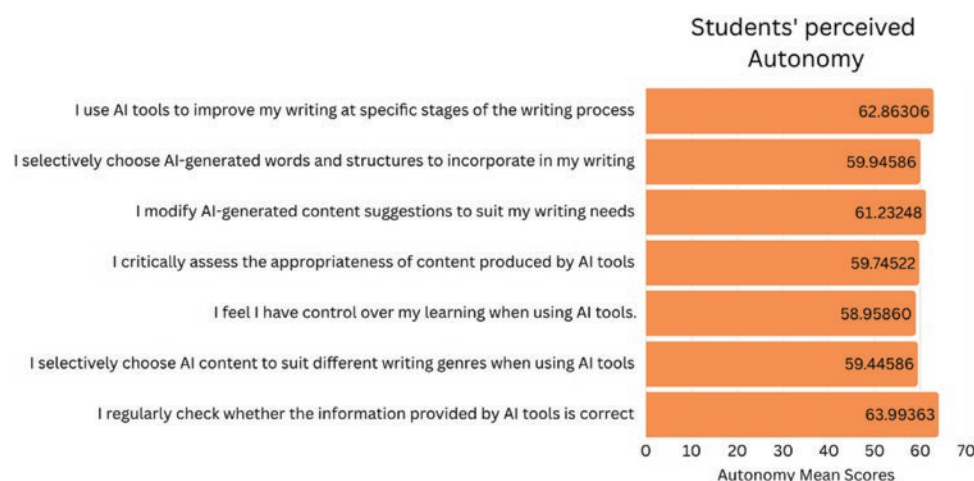


Figure 3 Students' Perceived Autonomy in AI Use for Academic Writing

Behaviours relating to selective use, i.e. choosing suitable tools ($M = 59.62$), selectively incorporating AI-generated language ($M = 59.95$), and adapting content for different genres ($M = 59.45$), also scored consistently high, indicating active curation rather than wholesale adoption of AI output. The lowest, though still strong, item was feeling in control of learning while using AI tools ($M = 58.96$), suggesting that while students act autonomously in practical writing decisions, some may be less certain about their broader learning control or agency, which could be further explained when reporting competence and relatedness constructs.

The follow-up interviews also further supported that EFL students demonstrated a strong sense of autonomy in using different AI and consciously navigated when and how to use these tools, often customising outputs or rejecting content that did not meet their expectations or academic standards. For example, EFL1 said:

I use various AI tools such as ChatGPT, Google Gemini and Copilot from Microsoft. I also use Claude... so yeah, I use several of them.... I use some of these AI tools for different purposes. I use them when I do my academic writing because I can see the pros and cons of each one [AI tools], and then I can produce my own writings based on them [the outputs].

EFL1 also illustrated autonomy through careful prompt engineering, aiming to maximise the usefulness of ChatGPT by framing his inputs in more strategic ways:

Imagine you are professionals in the IELTS academic world, so please guide me in writing something... and ChatGPT introduces some ideas for me to write and explain them carefully

He also showed awareness of how ChatGPT's memory function might influence outputs: *"I change the prompt or even create a new chat, because, you know, when we create a chat, ChatGPT may learn from the previous chat to produce the text"* These EFL students also clearly demonstrate decision-making autonomy in how they choose, prompt, and engage with AI tools. EFL2, for example, stated that as she is practising for IELTS test, she used ChatGPT to support idea generation in her essay: *"I often use ChatGPT for ideas, but actually, I just use it to generate ideas, and then I write it [the essay] myself."* She further clarified that *"I use ChatGPT to collect information, such as causes, solutions, or effects of*

pollution. Then I use the ideas to write my text". Despite using ChatGPT for a different writing genre, a letter, how EFL4 used ChatGPT for her writing, she is not a passive recipient but actively modify, adapt, and sometimes challenge AI outputs to align with academic goals and values, genres and their own voice. She said:

When I ask ChatGPT to write a letter, I do not just take what it gives me and use it straight away. I usually modify it to suit my style and needs. For example, I might add my own information or change the way it says something [the wording], so it sounds more like me.

Besides their own selection of different AI tools, students also aim to maintain their authorship in the responses created by AI, notably to avoid plagiarism: *"To preserve the scientific integrity, I do not copy them [AI outputs] because it's a grey area from AI [ethical unclear]. So, I do change something to make it [the writing] my own"* (EFL 1). EFL5 also added how she decided to use ChatGPT's ideas to support her writing, *"Before, I didn't have ideas [for my writing], but when I use ChatGPT, I can choose ideas [from ChatGPT] for myself. And then I can decide how to use them in my own writing"* (EFL5). EFL7 also stated that she always verifies claims, statistics and references provided by AI tools: *"I just use AI tools as a starting point, but I always verify claims, statistics and references with credible academic sources"*.

Competence – Student's Perceived Ability in Using AI Effectively

Regarding competence, or the students' ability in their growth in academic writing via the use of AI tool, the questionnaire results show that students generally perceive AI tools as supporting their sense of competence in academic writing, with mean scores across the eight competence items ranging from 56.52 to 65.19 (Figure 4). The highest-rated competence behaviour was using AI tools to correct language issues (M = 65.19), indicating that students feel particularly confident in relying on AI for linguistic accuracy. Students also reported high competence in planning their writing with AI (M = 63.43) and using AI to brainstorm ideas (M = 63.21), suggesting that AI tools play a strong facilitative role in the early stages of the writing process. Competence in maintaining overall writing coherence, such as keeping a smooth flow of ideas (M = 59.70) and writing different genres with AI support

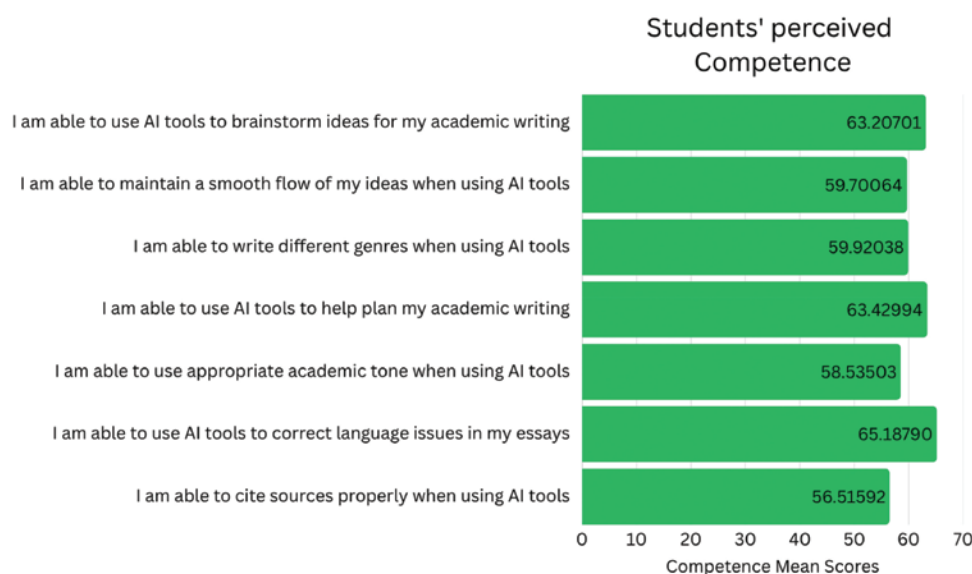


Figure 4 *Students' Perceived Competence in AI Use for Academic Writing*

($M = 59.92$), was also moderately strong. Lower scores appeared for constructing strong arguments with AI ($M = 58.08$) and using AI to achieve an appropriate academic tone ($M = 58.54$), highlighting areas where students may feel less confident in higher-order writing skills when using AI. The lowest-rated item was citing sources properly with AI tools ($M = 56.52$), suggesting ongoing uncertainty around academic integrity and referencing when integrating AI assistance. The pattern indicates that while AI tools significantly enhance students' perceived competence in idea generation, planning, and language accuracy, students feel less confident in applying AI to more advanced academic writing skills.

Interview data also reveal that students perceived significant gains in their writing competence through repeated AI-supported writing practice, particularly in vocabulary development, grammatical accuracy, and understanding academic text structure. Several learners described AI as a valuable linguistic resource for vocabulary development, exposing them to new lexical items and helping them understand their usage. As EFL1 explained, *"I learn many vocabularies [words] from AI tools like ChatGPT. They do have some extremely incredible words that I have not known before."* Similarly, EFL4 emphasised that she used AI as a lexical resource to help her understand how to use new words correctly in writing, but at the same time, reflected on the appropriateness of vocabulary for her target proficiency level like C1 or B2, *"My teacher taught us how to check if words are at the B1 or C1 level, and I try to make sure the words I use in my essays are appropriate for my level."*

In addition to vocabulary, AI tools helped students strengthen their grammar and sentence construction. EFL4 regularly used AI to *"check my grammar and understand how sentences are structured,"* and EFL6 explained, *"I ask how many grammatical errors I have, and how I can fix them... to make my writing clearer and more structured, and more concise."* Beyond language accuracy, students perceived AI as supporting higher-level academic writing skills, including planning, idea development, and genre awareness. EFL2, who was learning to write a discursive essay, highlighted that AI supported genre-specific planning, explaining, *"Currently, I am studying a discursive essay, so I am learning rules of [how to write] a detailed essay... AI created for me a plan [essay structure]."* Likewise, EFL3 described using AI as a tool for gathering and organising content ideas, stating,

I use ChatGPT to collect information such as causes, solutions, or effects of pollution. Then I use these ideas to write my text [essay]. It often teaches me vocabulary, grammar, structure, and collocations, and all the elements that form an essay.

Students also used AI to evaluate their writing performance, such as band-score feedback, when preparing for IELTS, although they observed discrepancies between AI ratings and human examiners. One learner who used AI as part of IELTS preparation, explained, *"Recently I joined IELTS, so I used ChatGPT to assess my writing. When I put essays into ChatGPT, it gives a lower band score than actual examiners."* (EFL3) Although this revealed discrepancies, the student still used AI-generated scoring as a learning tool to gauge performance.

Notably, students described learning of how to use AI through online communities, suggesting that perceived competence was also shaped by informal learning networks. As EFL6 shared, *"I saw a lot of videos talking about how to use [AI] productively in a smart way... Someone shared [them] with me... I came across them on Facebook or TikTok... and I also learned from the comments on YouTube videos."* EFL1 also shared, *"I watched YouTube and Instagram reels to learn how to use AI more effectively. Other users shared how to do it, and I learned from them."* This indicates that competency development extended beyond classroom instruction, with learners drawing on digital literacy practices and peer-generated knowledge via informal learning platforms.

Relatedness – Student's Perceived Sense of Connection and Support

Students' responses to the relatedness construct show a more varied pattern compared with autonomy and competence, with mean scores ranging from 50.43 to 71.25 (Figure 5). The strongest sense of relatedness emerged from students' perceptions that most of their classmates use AI tools in their writing ($M = 71.25$), suggesting that AI use is seen as a shared academic norm. Students also reported feeling supported in their AI use ($M = 64.88$) and able to share their experiences with others ($M = 64.27$), indicating that peer networks play a meaningful role in how AI tools are discussed and normalised. Confidence in using AI in alignment with university policies was moderately high ($M = 62.54$), and students felt some degree of support from instructors ($M = 60.83$), though this was less prominent than peer support. Lower agreement was observed for feeling a sense of connection through AI compared with working with peers ($M = 56.48$), suggesting that AI tools may not replace the collaborative aspects of writing. The lowest score was students' preference for AI feedback over human feedback ($M = 50.43$), indicating that despite the widespread use of AI tools, students still value human interaction and guidance. Overall, the findings show that while AI use is socially embedded among peers, it does not fully substitute interpersonal connections traditionally associated with academic writing.

The interview data further clarifies that students experience relatedness primarily through peer norms and shared practices around AI use. Rather than being an individual activity, AI use appears socially embedded within classroom interactions. For example, EFL2 stated, *"Everyone in my class always uses ChatGPT for their homework... they said it is useful and helps them do it quickly."*; while EFL4 explained that classmates share strategies and ideas, noting, *"we all try different ways to improve our writing."* EFL1 similarly described asking peers how they prompt AI and learning useful ways to frame questions. These accounts suggest that peer exchange functions as collaborative scaffolding, supporting competence while reinforcing a sense of belonging – a key dimension of relatedness in SDT. Because academic writing in Vietnamese universities is typically embedded within major-specific subjects rather than mixed cohorts, students can consult classmates working on the same content, which likely helps explain the moderately high questionnaire scores for feeling supported and being able to share experiences. As one learner summarised, *"Yes, sometimes I discuss AI tools with classmates and friends"* (EFL7), indicating that AI-related conversations has become normalised with peer interaction.

At the same time, the interviews explain the lower perceptions regarding emotional connection through AI and the very low preference for AI feedback over human feedback. Students consistently expressed

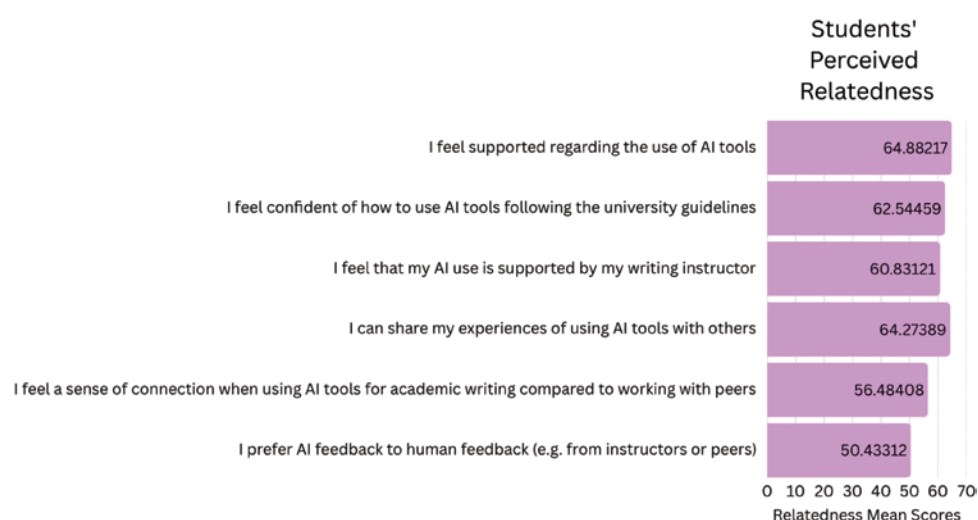


Figure 5 Students' Perceived Relatedness in AI Use for Academic Writing

that AI feedback lacked the nuance, personalisation, and care associated with teachers and peers. EFL1 explicitly stated, *"I prefer the instructor's feedback or my friend's feedback to the AI's feedback, because the humans made everything, not AI."* EFL2 reinforced this sentiment:

When your teachers give feedback,... you feel you can get closer to your teacher and sense the emotion. There is no doubt, human feedback is better... AI gives it [feedback] one tone only, but teachers help you understand more deeply.

EFL3 echoed this, noting, *"I love feedback from peers or teachers, because ChatGPT is not always correct or personalised to a situation."* EFL4 also emphasised trust in human relationships, explaining, *"I prefer feedback from my teacher, not from AI, because I trust the teacher more. They know me and my level, and their advice is based on real experience."* These excerpts confirm that AI is perceived as useful, but not relational.

The interviews also revealed variation in how openly students shared AI practices with peers, mirroring the moderate questionnaire scores. Some learners actively exchanged tips, such as EFL5, who explained, *"I tell my friends to always give clear instructions to ChatGPT and also check other websites to make sure the ideas are correct and match with their level."* EFL7 similarly said, *"I recommended Grammarly to a friend who was struggling with grammar and shared tips on using EndNote."* Others described more limited sharing. For instance, EFL6 highlighted both peer usage and social hesitation: *"Many of my classmates use AI just as much as I do... but we rarely share this experience with others."* This variation suggests that peer norms support AI use but do not uniformly translate into collaborative learning practices. However, when discussing feedback, rather than prompting strategies, students consistently emphasised emotional connection. EFL6's excerpt is particularly telling:

Teachers and peers genuinely want to see me improve, and their feedback reflects this care, which has a greater impact on me. I definitely prefer human feedback... because it brings an emotional depth that AI cannot replicate.

This aligns strongly with the questionnaire finding and reinforces that AI use is socially embedded, normalised, and often collaboratively discussed among peers. Interestingly, but students' sense of relatedness continues to be rooted in the human relationships they maintain with classmates and instructors. While AI supports academic tasks for EFL learners, it does not provide the emotional connection and personalised guidance.

Research Question 2: How do Students' Demographic (i.e. Age, Gender), and Educational Factors (i.e. Level of Education, Proficiency, Field of Study, and Institutional Context) Shape Their Perceptions?

In this section, several demographic and educational factors from the questionnaire, including age, gender, level of education, proficiency level, faculty or major, and university, were analysed to determine their impact on students' use of AI tools. These factors are categorised as having no significant impact and complex or significant impact with further elaboration from the interviews in the sections below.

No Significant Impact

Among different demographic and educational variables, educational level (i.e. undergraduate vs postgraduate students), Gender (i.e. Female, male and non-binary) and Age were not significant factors directing the learners' use of AI. Tables 2–4 present the t-value and p-value in this regard, showing no significant differences of these three factors in how students perceive their use of AI tools across any of the three SDT dimensions.

Table 2 *Educational Level Impact on AI Use*

Construct	t-value	p-value	Interpretation
Autonomy	0.70	0.484	Not significant
Competence	0.81	0.417	Not significant
Relatedness	-0.70	0.482	Not significant

Table 3 *Gender Impact on AI Use*

Construct	F-value	p-value	Interpretation
Autonomy	2.06	.106	Not significant
Competence	0.20	.899	Not significant
Relatedness	0.78	.506	Not significant

Table 4 *Age Factors on AI Use*

Construct	F-value	p-value	Interpretation
Autonomy	0.842	0.4317	Not significant
Competence	1.683	0.1875	Not significant
Relatedness	0.808	0.4466	Not significant

Complex and Significant Impact across Three Constructs

Faculties or specific discipline and universities were shown from the questionnaire as significant factors that influence students' perceived autonomy, competence and relatedness, whereas proficiency levels are shown as influential factors on autonomy and competence but not on the relatedness level of students.

Among 314 responses, there were 50 responses (15.9%) from VN1, 185 responses (58.9%) from VN2, and 79 responses (25.2%) from VN3. As shown in the Table 5, there are significant differences across universities in all three SDT constructs. This may reflect institutional practices, teaching strategies, or policy attitudes toward AI use within and among the universities.

Table 5 *University Impact on AI Use*

Construct	F-value	p-value	Interpretation
Autonomy	36.206	<.001	Highly significant
Competence	27.695	<.001	Highly significant
Relatedness	23.830	<.001	Highly significant

Similar to University, Table 6 shows statistically significant differences in students across Faculties regarding perceptions of autonomy, competence, and relatedness across different faculties. This suggests that students' experiences and motivations for using AI tools may be shaped by disciplinary

norms, teaching practices, and tool familiarity within their academic fields. Notably, students from the two universities come from relatively distinct faculties. For example, students from VN2 are mainly from BEL, whereas students from VN1 are primarily from HASS, which helps explain the correlation between institution and faculty in shaping students' use of AI tools.

Table 6 *Faculties Impact on AI Use*

Construct	F-value	p-value	Interpretation
Autonomy	6.147	.000001	Significant
Competence	4.666	.000055	Significant
Relatedness	7.086	<.001	Significant

Regarding proficiency level, students reported various language test results in the survey, including IELTS, CEFR, and TOEIC scores. As shown in Table 1, these results were converted into CEFR-equivalent levels. Among the 134 responses with reported proficiency, students' levels were distributed as follows: C1 (16%), B2 (63%), B1 (21%), and A2 (3.7%). As shown in Table 7, autonomy and competence in AI tool use significantly vary across CEFR levels. Relatedness, however, does not significantly vary by proficiency, suggesting that social engagement with AI use may be more culturally or institutionally influenced than linguistically driven.

Table 7 *Proficiency Level Impact on AI Use*

Construct	F-value	p-value	Interpretation
Autonomy	2.75	.046	Significant
Competence	2.78	.044	Significant
Relatedness	1.27	.287	Not significant

Notably, students' interviews have also revealed different perceived relatedness across universities regarding AI use for academic writing. EFL1 majored in BEL from VN1 and ELF2 majored in IT from VN 2 revealed different policies about AI use from their universities as well as perceived sense of support from teachers. For example, EFL1 stated that his university has explicit and strict rules on AI use, emphasising scientific integrity to avoid "AI abuse," and plagiarism:

Well, as I said, in my university there are strict rules to prevent us from using AI... Let me use words like "AI abusive." ... So, to prevent this, my university does have some tools such as Turnitin, or some Google tools to check if it [writing] was written by AI or not, s. So, at my university, integrity is considered crucial because we want our work, our research, to be clear, to be extremely... good and to avoid plagiarism.

EFL2, on the other hand mentioned that his university has AI policy, but it is rather unclear and ambiguous. He said,

Well, I have read the university's policy on AI, but it is not clear that, "Do you have to use it?" Or maybe, "Are you allowed to use it?" It just says that AI is a tool that helps your works. It does not say that AI can complete your work... So, isn't there a difference between "complete" and "support"? Maybe they [the university] just ignore it.

Compared with EFL1, where integrity and AI rules were clearly emphasised, the policy at VN2 is softer and underspecified. This lack of clarity does not strongly guide or support students in how to use AI appropriately.

Likewise, while in VN1, teachers are clear about rules in AI use, teachers from VN2 do not prohibit AI but do not guide its use either. EFL2 from VN2 indicated that he thinks that teachers know about students' use of AI but “pretend not to see”,

In my class, for example, maybe all the teachers know that we all use AI to support our work, but they do not say anything. They just ignore it. And you feel like, oh, I can use it. Our teachers do not talk about it, or say that you must not use it, but [also not] that we have to use it, so I do not know... It is quite confusing.

Whereas for EFL1, his lecturers communicate and enforce rules while supporting appropriate AI use in practice:

Yes, almost every lecturer in my university agrees that we can use AI tools. However, as I said, we must not abuse them, so our teachers provide regulations... Before we do something, write reports or complete other written tasks, they warn us so carefully that they will be strict when checking with Turnitin or other tools.

Despite these clear rules against “abusing” AI use, EFL1 noted that there are no AI-integrated activities in class activities to show them how to use AI appropriately or how to integrate it into class activities.

Overall, these findings reveal several key factors that significantly influence how EFL learners engage with AI tools for academic writing. While no significant differences were observed between undergraduate and postgraduate students across age groups and gender, faculty affiliation, university, and language proficiency emerged as statistically significant variables. These indicate that disciplinary norms, teaching practices, institutional policies, exposure to AI technologies, or varying levels of digital literacy training significantly shape how students integrate AI tools into their writing processes. The next section will discuss these differences in greater detail.

Discussion

How does AI as a “Game Changer” Work?

In this study, Vietnamese learners demonstrated their moderate to strong sense of ownership and control in using AI tools, but with constraints, which was influenced by institutional policy, students' major and proficiency levels. Students frequently described intentional and critical tool use, using AI to brainstorm, clarify ideas, or revise drafts, rather than copying outputs wholesale. This aligns with previous studies in other EFL contexts, such as Iran (e.g. Fathi & Rahimi, 2026), China (e.g. Chen & Gong, 2025) and Indonesia (e.g. Tusino et al., 2025), where students have used AI as a form of strategic support in writing, fostering self-regulated learning and more agentic use of technology when appropriate support and digital literacy were present. Notably, the current study shows that learner autonomy and resilience exist within tensions created by institutional ambiguity, signalling a shift toward more learner-driven engagement in academic literacy. Some students reported using AI tools “quietly” due to and despite unclear or restrictive classroom policies, an issue also reported in other Asian contexts where hierarchical teacher-student dynamics influence self-disclosure (Tran & Nguyen, 2024; Trinh & Pho, 2024). This also reinforces the need to move away from “policing” students' use of AI, which could create feelings of guilt and shame—a strong cultural feature among

some Asian learners, such as those in Vietnam—and may discourage open discussion and collaboration in AI use, towards guiding and empowering students to engage with AI responsibly, critically, and ethically for different learning purposes. .

Regarding competence in using AI tools, students reported feeling more capable in some areas, especially surface-level skills such as grammar and vocabulary improvement, structural scaffolding for essays and reports, while remaining unsure about more advanced academic writing tasks, such as citing, referencing or tone. These findings highlight the importance of focusing on these high-level academic writing functions, which echoes previous studies that AI tools support writing fluency and complexity in EAP courses when used reflectively (Polakova & Ivenz, 2024).

Notably, while Xu and Jumaat (2024) observed that EFL learners in Southeast Asia prioritise AI use for improving mechanical accuracy and formality, in the Vietnamese EFL context, academic writing in higher education serves multiple and layered purposes but is primarily assessment-driven (e.g. standardised exams such as IELTS/TOEFL), and thus AI is often used for these purposes. Writing is often taught as a product-focused skill and assessed rigidly (Pham & Truong, 2021), including genres such as emails/ letters, reports for practical communication, as well as common essay types such as causes and solutions, or for credentialing and international mobility like study abroad applications. Vietnamese learners therefore often approach writing tasks with exam-oriented goals (e.g., IELTS or graduation theses), and tend to favour AI tools that provide quick, actionable feedback.

How do Contextual Factors Shape EFL Students' use of AI?

Sociocultural settings, not merely technological affordances, play a critical role in shaping learners' experiences and strengthening their sense of support and connection in EFL environments, thereby influencing the effectiveness of AI use. Despite the digital mediation of writing, students expressed a consistent preference for human interaction, particularly teacher feedback and peer collaboration, reflecting the importance of peer support and teacher trust in collectivist contexts. These insights reflect the collectivist orientation in EFL settings in general (Soori et al., 2025; Zou et al., 2024), or in Vietnamese classrooms in particular, where social harmony, group learning, and teacher authority are key values (Nguyen & Habók, 2021; Trinh & Pho, 2024). In such contexts, AI is seen as a helpful tool, but not a substitute for relational learning.

Unlike in some Western contexts where independence is emphasised, Vietnamese learners often view progress as a collaborative effort, influenced by both peer modelling and teacher affirmation. While AI tools lack personalisation or emotional nuance, students found peer validation and teacher encouragement far more motivating, reinforcing SDT's assertion that relatedness fosters deeper engagement. Enhancing "relatedness" or human-centered values is thus a key for sustainable academic writing instruction and AI use more broadly. Interestingly, students also turned to social platforms (e.g., TikTok, Facebook, and YouTube) to learn AI prompting techniques and usage strategies, revealing a layer of informal social learning that extends beyond the classroom. Exploring this space to support AI use in ways aligned with learners' proficiency levels may offer valuable pedagogical opportunities.

What is Next in Academic Writing Instruction in EFL Contexts in the Age of AI?

Moving forward, this study suggests that EAP instruction in Vietnamese contexts, and in other EFL contexts more broadly, should adopt a scaffolded, ethical, and human-centred approach to integrating AI tools. By positioning AI as a pedagogical partner that complements, but does not replace, human interaction, feedback, collaboration, and support from peers and teachers, this study suggests the following pedagogical implications.

First, students' reported confusion about institutional rules for AI use highlights the need for clear, contextualised institutional policies and pedagogical strategies that recognise disciplinary, linguistic, and contextual diversity within EAP settings and provide guidelines to support ethical engagement. Resonating with Hu and Zhang (2025)'s call for urgent exploration of how digital tools can be effectively integrated into EAP pedagogy, as well as how institutional policies and contextual factors shape access to academic resources and opportunities, this study suggests important implications for EAP programs in EFL contexts. Specifically, such programs should emphasise explicit instruction in ethical AI literacy alongside ongoing scaffolding, support and practice in using AI tools to help students critically evaluate AI outputs and avoid over-reliance or plagiarism. These practices not only align with recent calls to develop "critical AI awareness" in academic literacy education (Almanea, 2024; Guo & Wang, 2024) but also support the establishment of clear guidelines for AI use in instruction and assessment, creating boundaries between acceptable and unacceptable uses, considering the big picture of academic writing and educational learning outcomes. Referencing SDT-informed pedagogy in an ESL context (e.g. Tran et al., 2025), such as AI prompting, or collaboratively evaluating and revising AI-generated texts, references generation or tone, may also inform academic writing instruction to foster students' autonomy, competence, and relatedness in engaging with AI tools for academic purposes in EFL settings.

Second, AI integration should be strategically scaffolded across stages of writing instruction while maintaining the central role of human feedback, especially through collaborative learning activities where peer and teacher support are valued. This finding resonates with the previous research showing that teacher and peer feedback remain essential for sustaining motivation and improving revision quality, even within AI-supported environments (Abdi Tabari et al., 2025; Fan et al., 2024; Zeevy-Solovey, 2024). Collaborative activities such as comparing peer-AI-teacher generated feedback or jointly critiquing AI-generated texts can help students build a nuanced understanding of AI's strengths and limitations (Kim et al., 2022; Zhang & Wang, 2025). These activities are particularly important in EFL contexts where peer support and teacher affirmation are highly valued. Future work thus may further explore feedback practices in academic writing (Hu, 2026), including how AI might augment teacher and peer feedback and help students interpret teachers' feedback during the post-writing stage to form sustainable learning outcomes and foster learners' feedback efficacy.

Third, given the prominent role of language tests in Vietnamese contexts, EAP instruction could focus on developing students' competence in AI-supported test preparation, including effective prompting strategies, linguistic awareness, and task-specific and test-specific writing preparation. AI literacy should be aligned with the demands of international language tests (e.g., IELTS vs TOEIC) and relevant disciplinary writing genres (e.g., essays vs reports). Considering the impact of learners' proficiency levels on their autonomy and competence in AI use, instruction should also be tailored to proficiency levels for different exam-oriented AI literacy support to foster critical use, decision-making, and judgement, particularly in areas where students feel less confident, such as citation practices and discipline-specific writing conventions.

Fourth, academic writing instruction should emphasise the development of students' own voice and tone. Fostering writer identity, which extends beyond grammar correction or mechanical accuracy, is a crucial goal as AI-generated texts become more prevalent. Activities can include stylistic choices and rhetorical positioning, and cultivating sociocultural awareness may support the formation of an EFL writer identity. Combining AI-generated texts with other teaching methods such as corpus-based activities is also valuable.

Fifth, fostering informal learning spaces alongside formal instruction, potentially facilitated through social platforms like YouTube, Facebook or TikTok, may strengthen students' autonomy and relatedness,

consistent with SDT beyond academic writing. As recent studies suggest, human-centered initiatives in which AI works as a complement, rather than a replacement for human-centred pedagogy (Asadi et al., 2025; Hossain & Al Younus, 2025; Ryan, 2025), should be fostered for the long term. Integrating peer-centred relatedness with teacher-supported relatedness, for example, through student-created prompt libraries or reflective sharing tasks, can foster a sense of trust, connection, and support both inside and outside the classroom, across formal instruction and informal social learning platforms. How these activities are implemented effectively, for the sustainable development of AI literacy and effective academic writing practices; however, largely depends on teachers' beliefs and efficacy in AI use. Shedding light on EAP teacher's AI literacy and AI-integrated practices, individually or within communities such as teacher–student partnerships or teacher communities of practice, is crucial.

Conclusion

To conclude, this study examined how Vietnamese EFL undergraduates perceive and use AI tools in their academic writing and the factors influencing this use within the EFL sociocultural context, drawing on SDT theory and mixed-methods data. Rather than functioning as passive adopters, students actively regulate how AI supports their writing, seek skill development, and remain socially engaged in their learning, and use AI strategically and critically. However, the perceived ownership, ability, and sense of belonging and support depends on institutional policies, teachers' enacted initiatives in class, and partly, students' self-reported proficiency. Instruction grounded in SDT principles, supported by explicit modelling and feedback-rich environments with peer and teacher support, as well as strategy- and exam-oriented tasks, can promote students' self-regulation, confidence, and long-term academic literacy development. To truly benefit from these tools and cultivate more autonomous and reflective writers, EAP instruction must evolve, not to compete with AI, but to humanise and deepen the learning experience that AI supports.

Given its contribution to the limited scholarship in exploring how EFL students use AI tools for academic writing within sociocultural context, this study has several limitations that suggest directions for future research. As the sample was limited to Vietnamese EFL students at selected universities, the generalisability of the findings may be restricted. Additionally, although students' self-reported proficiency scores (e.g., IELTS, TOEIC) were converted to CEFR levels, these CEFR levels may have been influenced by local Vietnamese CEFR interpretations, which could introduce inaccuracies in the conversion process. Future studies should consider more robust measures of proficiency rather than relying solely on self-reported scores. Longitudinal designs and targeted instructional interventions, such as SDT-informed pedagogy, would also help track how students' AI practices and self-determination develop over time.

References

- Abdi Tabari, M., Kushki, A., & Wang, Y. (2025). Comparing the effects of teacher- and AI-mediated corrective feedback on accuracy, complexity, and quality in L2 written narratives. *Computer Assisted Language Learning*, 1–24.
- Al-Hoorie, A. H., Oga-Baldwin, W. L. Q., Hiver, P., & Vitta, J. P. (2025). Self-determination mini-theories in second language learning: A systematic review of three decades of research. *Language Teaching Research: LTR*, 29(4), Article 13621688221102686. <https://doi.org/10.1177/13621688221102686>
- Almanea, M. (2024). Instructors' and learners' perspectives on using ChatGPT in English as a foreign language courses and its effect on academic integrity. *Computer Assisted Language Learning*, 1–26. <https://doi.org/10.1080/09588221.2024.2410158>
- Altınmakas, D., & Bayyurt, Y. (2019). An exploratory study on factors influencing undergraduate students' academic writing practices in Turkey. *Journal of English for Academic Purposes*, 37, 88–103. <https://doi.org/10.1016/j.jeap.2018.11.006>

- Alsaiani, O., Baghaei, N., Lahza, H., Lodge, J. M., Boden, M., & Khosravi, H. (2025). Emotionally enriched AI-generated feedback: Supporting student well-being without compromising learning. *Computers and Education*, 239, Article 105363. <https://doi.org/10.1016/j.compedu.2025.105363>
- Asadi, M., Ebadi, S., & Mohammadi, L. (2025). The impact of integrating ChatGPT with teachers' feedback on EFL writing skills. *Thinking Skills and Creativity*, 56, 101766. <https://doi.org/10.1016/j.tsc.2025.101766>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Campbell, M. (2019). Teaching academic writing in higher education. *Education Quarterly Reviews*, 2(3), 608–614. DOI: 10.31014/aor.1993.02.03.92
- Chapelle, C. A. (2025). Generative AI as game changer: Implications for language education. *System (Linköping)*, 132, Article 103672. <https://doi.org/10.1016/j.system.2025.103672>
- Chen, C., & Gong, Y. (2025). The role of AI-assisted learning in academic writing: A mixed-methods study on Chinese as a second language students. *Education Sciences*, 15(2), 141. <https://doi.org/10.3390/educsci15020141>
- Deci, E. L., & Ryan, R. M. (Eds.). (2002). *Handbook of Self-determination Research*. University Rochester Press.
- Du, J., & Alm, A. (2024). The impact of ChatGPT on English for Academic Purposes (EAP) students' language learning experience: A self-determination theory perspective. *Education Sciences*, 14(7), 726. <https://doi.org/10.3390/educsci14070726>
- Fan, Y., Tang, L., Le, H., Shen, K., Tan, S., Zhao, Y., Shen, Y., Li, X., & Gašević, D. (2025). Beware of metacognitive laziness: Effects of generative artificial intelligence on learning motivation, processes, and performance. *British Journal of Educational Technology*, 56(2), 489–530. <https://doi.org/10.1111/bjet.13544>
- Fan, Y., Tan, S., & Lim, G. Y. W. (2024). EAP teacher feedback in the age of AI: Supporting first-year students in EFL disciplinary writing. *Australian Journal of Applied Linguistics (Online)*, 7(3), 1943. <https://doi.org/10.29140/ajal.v7n3.1943>
- Fathi, J., & Rahimi, M. (2026). Utilising artificial intelligence-enhanced writing mediation to develop academic writing skills in EFL learners: A qualitative study. *Computer Assisted Language Learning*, 39(1-2), 263–302. <https://doi.org/10.1080/09588221.2024.2374772>
- Figueredo, L., & Varnhagen, C. K. (2006). Spelling and grammar checkers: Are they intrusive? *British Journal of Educational Technology*, 37(5), 721–732. <https://doi.org/10.1111/j.1467-8535.2006.00562.x>
- Fuchs, K. (2023). Exploring the opportunities and challenges of NLP models in higher education: Is Chat GPT a blessing or a curse? *Frontiers in Education (Lausanne)*, 8, Article 1166682. <https://doi.org/10.3389/feduc.2023.1166682>
- Guo, K., & Wang, D. (2024). To resist it or to embrace it? Examining ChatGPT's potential to support teacher feedback in EFL writing. *Education and Information Technologies*, 29, 8435–8463. <https://doi.org/10.1007/s10639-023-12146-0>
- Hossain, M. K., & Al Younus, M. A. (2025). Teachers' perspectives on integrating ChatGPT into EFL writing instruction. *TESOL Communications*, 4(1), 41–60. <https://doi.org/10.58304/tc.20250103>
- Hu, G. (2026). GenAI! GenAI? GenAI... *Journal of English for Academic Purposes*. Article 101650. <https://doi.org/10.1016/j.jeap.2026.101650>
- Hu, G., & Zhang, W. (2025). English for academic purposes as a field of practice and inquiry: A personal viewpoint. *RELC Journal*, 56(3), 821–834. <https://doi.org/10.1177/00336882251378256>
- Huang, J. C. (2024). Unveiling EFL graduate students' EAP needs and perceptions of EAP courses: A large-scale survey in Taiwan. *Journal of English for Academic Purposes*, 68, Article 101348. <https://doi.org/10.1016/j.jeap.2024.101348>

- Huang, J., & Mizumoto, A. (2024). Examining the effect of generative AI on students' motivation and writing self-efficacy. *Digital Applied Linguistics*, 1, 102324–102324. DOI: 10.29140/dal.v1.102324
- Jones, N. (2025). AI hallucinations can't be stopped — but these techniques can limit their damage. *Nature (London)*, 637(8047), 778–780. <https://doi.org/10.1038/d41586-025-00068-5>
- Kaufhold, K., & Tusting, K. (2019). Academic writing. In K. Tusting (Ed.), *The Routledge Handbook of Linguistic Ethnography* (pp. 356–370). Routledge.
- Kim, M. K., Kim, N. J., & Heidari, A. (2022). Learner experience in artificial intelligence-scaffolded argumentation. *Assessment & Evaluation in Higher Education*, 47(8), 1301–1316. <https://doi.org/10.1080/02602938.2022.2042792>
- Kosmyna, N., Hauptmann, E., Yuan, Y. T., Situ, J., Liao, X. H., Beresnitzky, A. V., et al. (2025). *Your brain on ChatGPT: Accumulation of cognitive debt when using an AI assistant for essay writing task*. Cornell University. <https://doi.org/10.48550/arXiv.2506.08872>
- Le, T. K., & Nguyen, T. M. H. (2025). The impact of linguistic, structural, and affective proficiency on academic writing challenges among tertiary students. *European Journal of English Language Teaching*, 10(1). DOI: 10.46827/ejel.v10i1.5959
- Lodge, J. M., Thompson, K., & Corrin, L. (2023). Mapping out a research agenda for generative artificial intelligence in tertiary education. *Australian Journal of Educational Technology*, 39(1), 1–8. <https://doi.org/10.14742/ajet.8695>
- Lu, D. (2025). Supporting genre-based writing instruction in EAP with a blended collaborative learning environment: A case study of a graduate-level EFL academic writing course. *Journal of English for Academic Purposes*, 78, Article 101589. <https://doi.org/10.1016/j.jeap.2025.101589>
- Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organisation of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2236469>
- Mekheimer, M. (2025). Generative AI-assisted feedback and EFL writing: A study on proficiency, revision frequency and writing quality. *Discover Education*, 4(1), Article 170. <https://doi.org/10.1007/s44217-025-00602-7>
- Nelson, A. S., Santamaría, P. V., Javens, J. S., & Ricaurte, M. (2025). Students' perceptions of Generative Artificial Intelligence (GenAI) use in academic writing in English as a foreign language. *Education Sciences*, 15(5), 611. <https://doi.org/10.3390/educsci15050611>
- Nghi, N. P. A., & Truong, T. N. (2023). Difficulties of Vietnamese students in learning academic writing. *International Journal of Asian Education*, 4(2), 106–114. <https://doi.org/10.46966/ijae.v4i2.340>
- Nguyen, V. S., & Habók, A. (2021). Students' beliefs about teachers' roles in Vietnamese classrooms. *Electronic Journal of Foreign Language Teaching*, 18(1), 38–59.
- Noels, K. A. (2001). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning*, 51(1), 107–144. <https://doi.org/10.1111/0023-8333.00149>
- Noels, K. A. (2023). Self-determination theory and language learning. In R. M. Ryan (Ed.), *The Oxford Handbook of Self-Determination Theory* (pp. 619–637). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780197600047.013.31>
- Pham, V. P. H., & Truong, M. H. (2021). Teaching writing in Vietnam's secondary and high schools. *Education Sciences*, 11(10), 632. <https://doi.org/10.3390/educsci11100632>
- Polakova, P., & Ivenz, P. (2024). The impact of ChatGPT feedback on the development of EFL students' writing skills. *Cogent Education*, 11(1), Article 2410101. <https://doi.org/10.1080/2331186X.2024.2410101>
- Robertson, J., Ferreira, C., Botha, E., & Oosthuizen, K. (2024). Game changers: A generative AI prompt protocol to enhance human-AI knowledge co-construction. *Business Horizons*, 67(5), 499–510. <https://doi.org/10.1016/j.bushor.2024.04.008>

- Ryan, M. (2025). We're only human after all: A critique of human-centred AI. *AI & Society*, 40(3), 1303–1319. <https://doi.org/10.1007/s00146-024-01976-2>
- Soori, A., Khojasteh, L., & Javed, F. (2025). Comparing teacher E-feedback, AI feedback, and hybrid feedback in enhancing EFL writing skills. *Technology in Language Teaching & Learning*, 7(3), 102626. <https://doi.org/10.29140/tltl.v7n3.102626>
- Stojanov, A. (2023). Learning with ChatGPT 3.5 as a more knowledgeable other: An autoethnographic study. *International Journal of Educational Technology in Higher Education*, 20(1), Article 35. <https://doi.org/10.1186/s41239-023-00404-7>
- Teng, M. F. (2024). A systematic review of ChatGPT for English as a foreign language writing: Opportunities, challenges, and recommendations. *International Journal of TESOL Studies*, 6(3), 36–57. <https://doi.org/10.58304/ijts.20240304>
- Tran, H. N., Le, T. T. N., & Tran, V. B. U. (2025). AI tools in learning academic writing: Benefits and challenges for MA students in the English Language Studies at the Industrial University of Ho Chi Minh City. *International Journal of AI in Language Education*, 2(1), 74–91. <https://doi.org/10.54855/ijaile.25215>
- Tran, H., Crosthwaite, P., & Pham, Q. H. P. (2025). Students' self-determination in using machine translation and generative AI tools for English for academic purposes. *Journal of English for Academic Purposes*, 78, Article 101578. <https://doi.org/10.1016/j.jeap.2025.101578>
- Tran, T. T. L., & Nguyen, V. L. (2024). Cultural influences on learner autonomy from the perspectives of Vietnamese EFL learners. *TESL-EJ*, 28(2), 1. <https://doi.org/10.55593/ej.28110a5>
- Trinh, K. N., & Pho, P. D. (2024). English academic writing through the lens of culture: Implications for current practices in Vietnam. *VNUHCM Journal of Science and Technology Development*, 27(SI), 56–63. <https://doi.org/10.32508/stdj.v27iSI.4409>
- Tusino, T., Dewi, P., Hati, M. L. P., & Iglesia, M. J. C. (2025). ChatGPT in academic writing classes: Exploring EFL students' perspectives. *JOLLT Journal of Languages and Language Teaching*, 13(4), 2162–2172. <https://doi.org/10.33394/jolllt.v13i4.15293>
- Wang, C., Wang, B., & Xu, D. (2025). The role of ChatGPT and Grammarly in promoting emotion regulation, psychological well-being, motivation, and academic writing in Chinese college students: A self-determination theory perspective. *Learning and Motivation*, 90, Article 102131. <https://doi.org/10.1016/j.lmot.2025.102131>
- Wang, Y. (2024). Cognitive and sociocultural dynamics of self-regulated use of machine translation and generative AI tools in academic EFL writing. *System (Linköping)*, 126, Article 103505. <https://doi.org/10.1016/j.system.2024.103505>
- Wiboolyasarini, W., Wiboolyasarini, K., Kamonsawad, R., & Jinowat, N. (2025). Enhancing collaborative writing with Grammarly-mediated feedback in asynchronous Wiki environments: An investigation of group size. *English Teaching & Learning*, 49(2), 389–414. <https://doi.org/10.1007/s42321-024-00186-9>
- Xu, T., & Jumaat, N. F. (2024). ChatGPT-empowered writing strategies in EFL students' academic writing: Calibre, challenges and chances. *International Journal of Interactive Mobile Technologies*, 18(15). <https://doi.org/10.3991/ijim.v18i15.49219>
- Zeevy-Solovey, O. (2024). Comparing peer, ChatGPT, and teacher corrective feedback in EFL writing: Students' perceptions and preferences. *Technology in Language Teaching & Learning*, 6(3), 1482–1482. <https://doi.org/10.29140/tltl.v6n3.1482>
- Zhang, J., & Wang, J. (2025). Student perceptions of hybrid feedback: Using gen-AI to enhance engagement with EAP writing feedback. *The JALT CALL Journal*, 21(2), Article 2175. <https://doi.org/10.29140/jaltcall.v21n2.2175>
- Zou, S., Guo, K., Wang, J., & Liu, Y. (2024). Investigating students' uptake of teacher-and ChatGPT-generated feedback in EFL writing: A comparison study. *Computer Assisted Language Learning*, 1–30. <https://doi.org/10.1080/09588221.2024.2447279>